



DOE Loan Programs Office

Deployment: How the Government Delivers
Clean Energy and Green Jobs Today

March 8, 2011



U.S. DEPARTMENT OF
ENERGY

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Bridging the Clean Energy “Valley of Death”

LPO financing helps fill a well-documented gap in the market

	Research & Development	Demonstration/ Proof of Concept	Deployment/ Pilot Facility	Diffusion/ Commercialization	Commercial Maturity
	“Valley of Death”				
Private Funding Source	Angel / Series A venture capital	Series B venture capital	Series C & later	Limited VC or corporate equity for a few companies	<ul style="list-style-type: none"> • Corporate investor / public markets • Project finance
Public / Non- Profit Funding Source	<ul style="list-style-type: none"> • DOE grants (e.g., Energy Frontier Research Centers) • State programs • University Funding 	<ul style="list-style-type: none"> • DOE grants (e.g., Solar and wind program funding, ARPA-E) • State programs • University Funding 	<ul style="list-style-type: none"> • DOE demonstration programs (e.g., smart grid demonstration, clean coal power initiative) 	<ul style="list-style-type: none"> • DOE Loan Programs 	<ul style="list-style-type: none"> • Investment / Production Tax Credits



Impact of the Loan Programs

LPO has made a significant contribution to our national clean energy economy

- Over \$26 billion in loan and loan guarantees to 25 clean energy projects with over **\$42 billion in total project costs**
- Created or saved over **59,000 jobs across 20 states**
- Will avoid approximately 40 million tons of carbon dioxide from the air every year – equivalent to 25 conventional coal plants
- LPO's eight power generation projects will produce nearly 23 million megawatt-hours of clean energy – **enough to power almost 2 million homes**
 - Total project costs for generation projects almost double amount invested in clean generation projects by entire U.S. private sector in 2009
- ATVM projects will save approximately 282 million gallons of petroleum annually – roughly the same as removing almost 500,000 cars from the road



Solyndra



Shepherds Flat

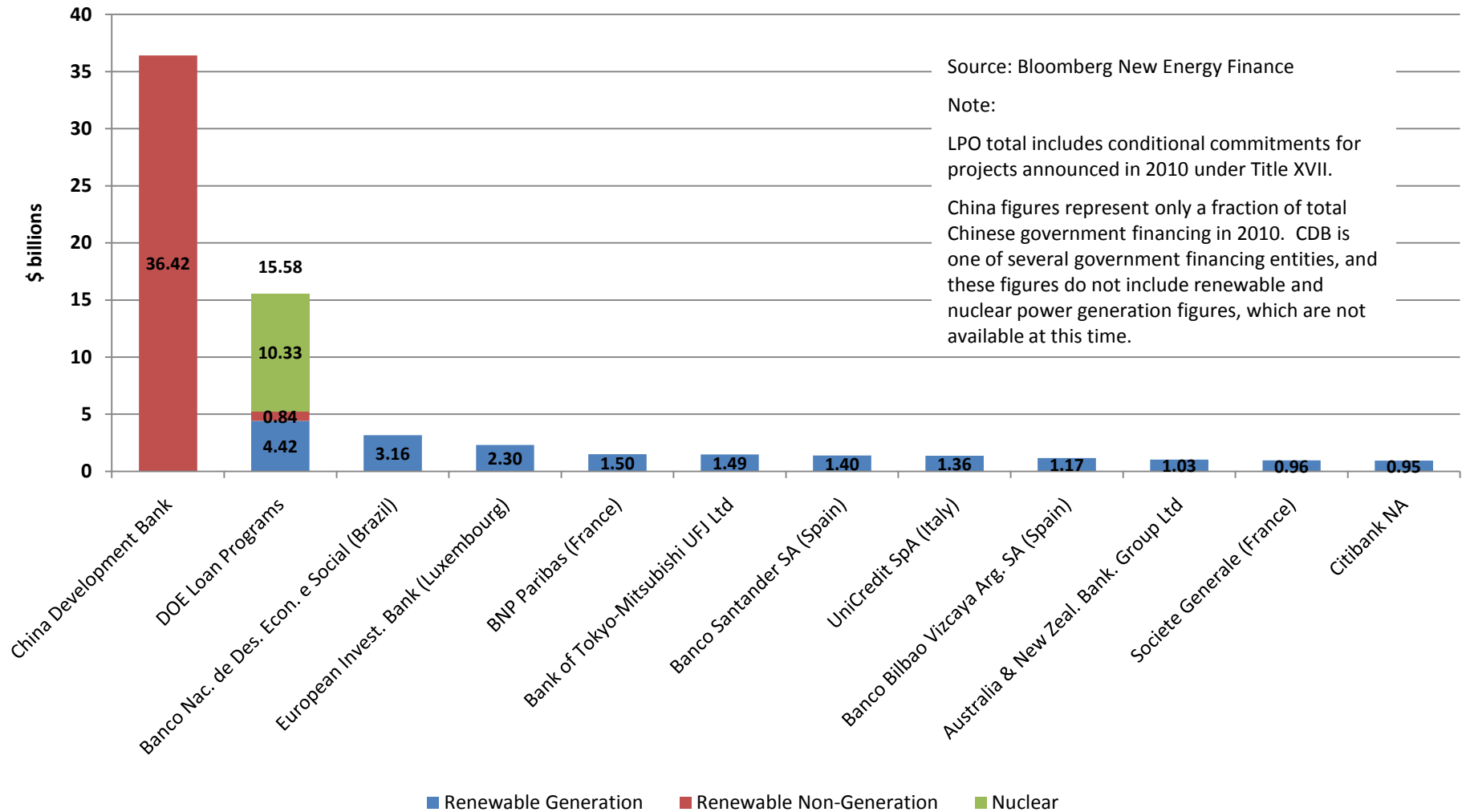


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In CY2010, LPO Was World's Largest Financier of Renewable Energy Projects, Excluding China



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Sample Projects

LPO-financed projects are changing the national clean energy landscape

In the last 12 months, LPO has financed:

- A biodiesel project that will nearly triple the amount of renewable diesel produced domestically (700 construction; 60 permanent jobs)
- The world's largest Photovoltaic solar plant (400 construction; 10 permanent jobs)
- Two of the world's largest solar thermal projects that will double the amount of solar thermal power in the U.S. (2,600 construction; 166 permanent jobs)
- The world's largest wind farm to date (400 construction; 35 permanent jobs)
- The first nuclear power plant in the last three decades (3,500 construction; 800 permanent jobs)
- The first factory built wheelchair-accessible vehicle that will run on compressed natural gas (900 permanent jobs)



Abound



VPG



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Current Project Footprint

LPO has already supported projects in 20 states



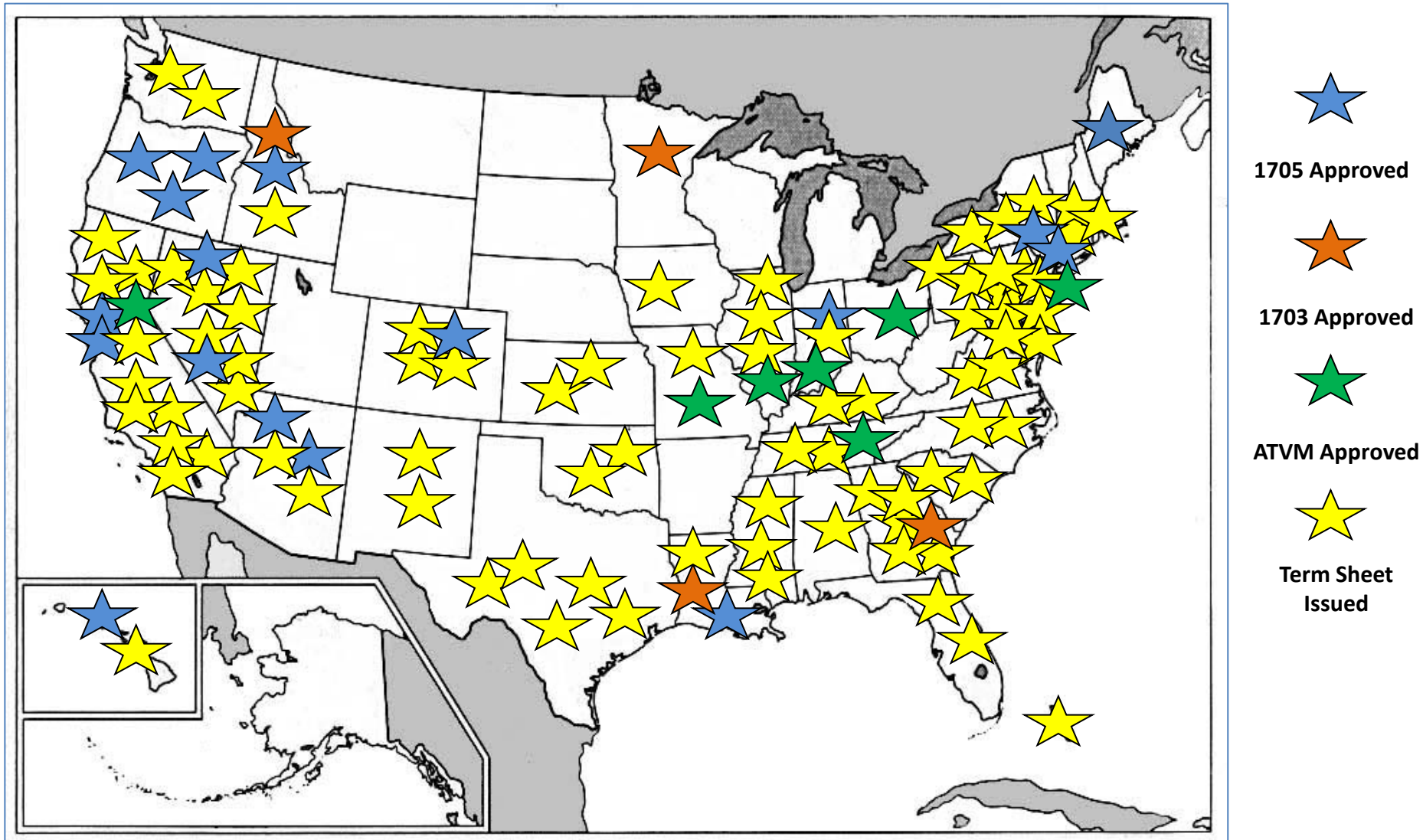
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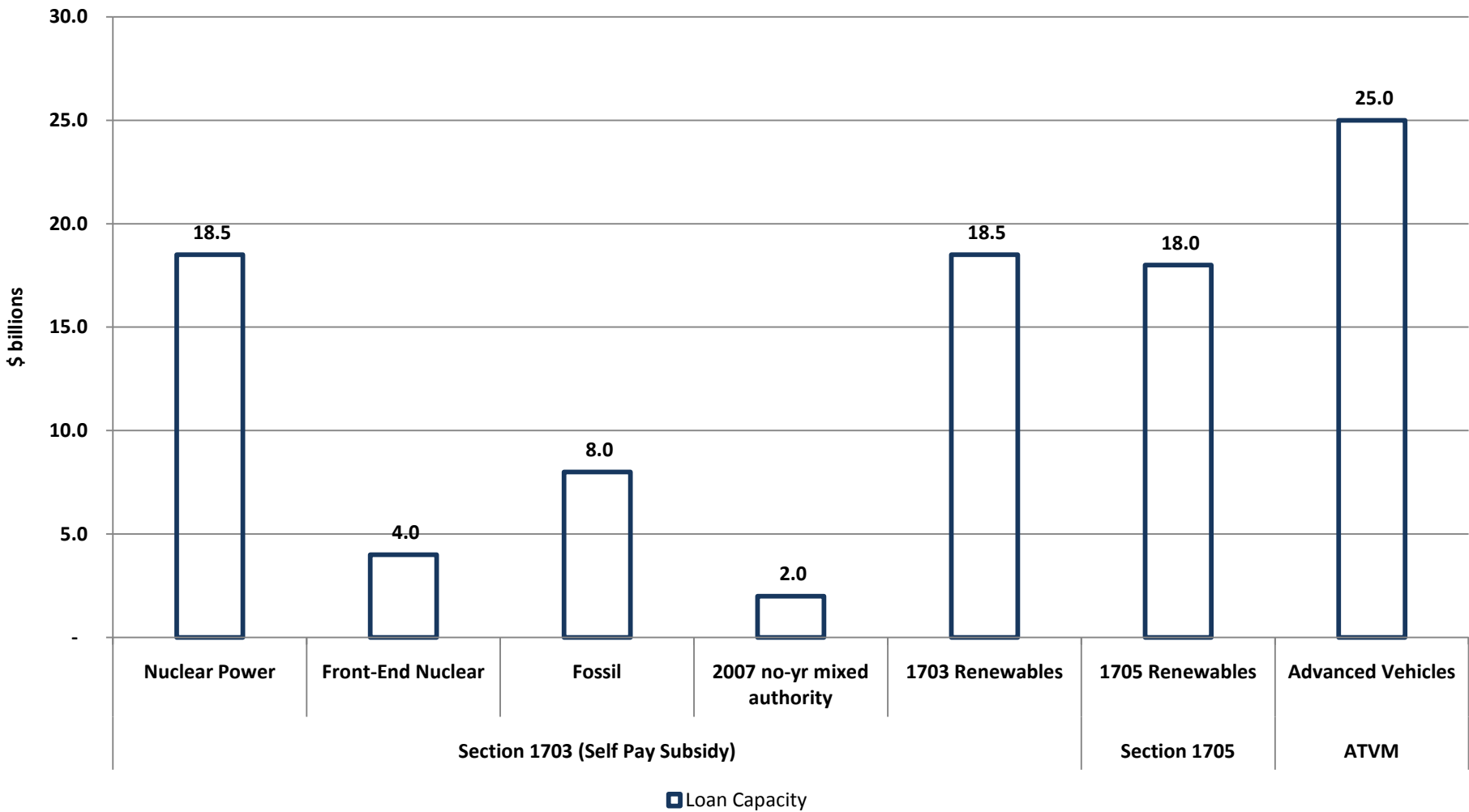
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Future Project Footprint

Projects in term sheet negotiations will expand our footprint to 33 states



Total LPO Loan Capacity

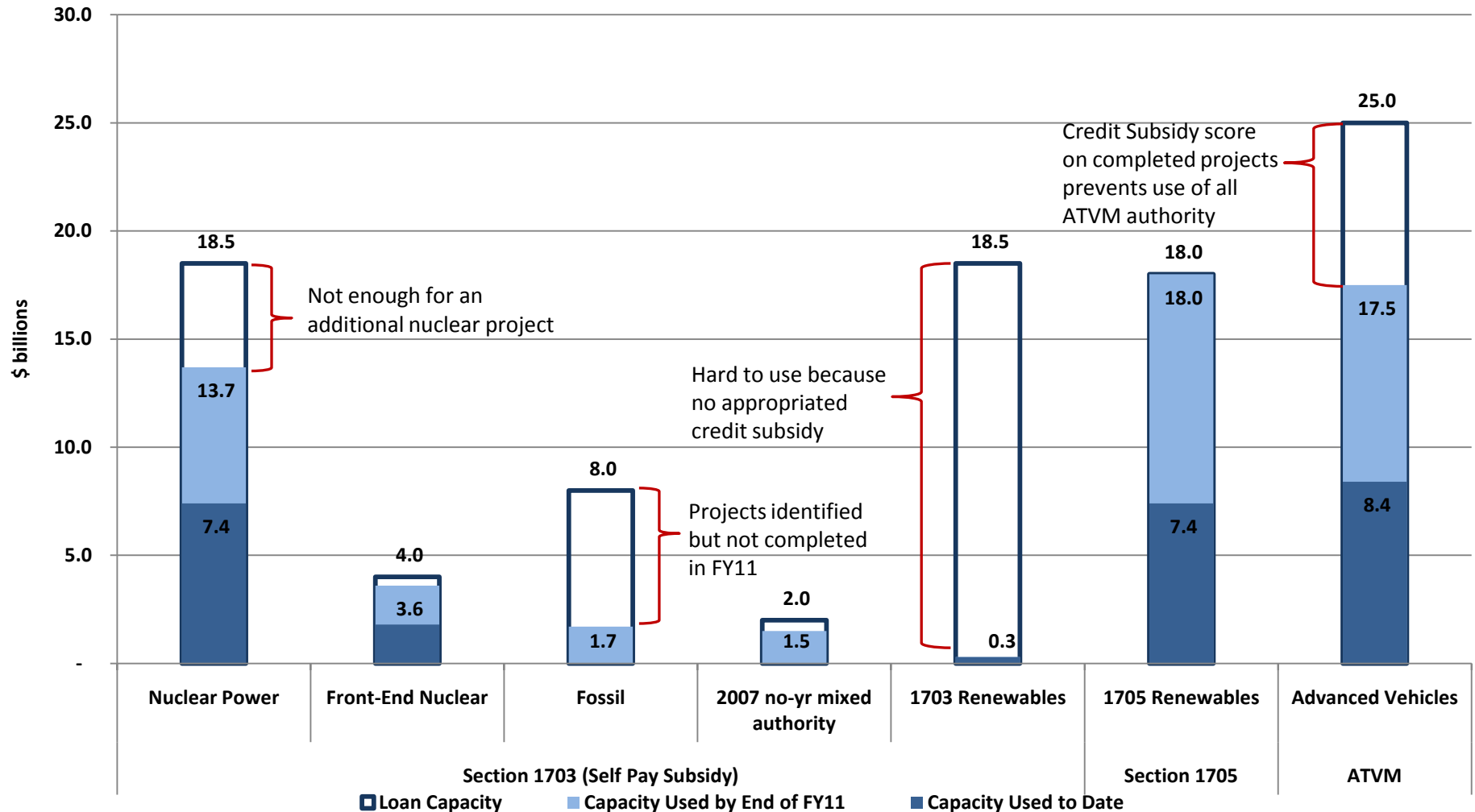


Note: Section 1703 and ATVM capacity is based on current authorities.
Section 1705 capacity is imputed from current credit subsidy appropriations of \$2.435b, using an assumed average subsidy of 13.5%.

Loan Capacity Usage

LPO will use much of its loan capacity by the end of FY11

Loan Capacity Usage Forecast



Conclusion

- Loan Programs Work
 - Over \$26 billion in loans and loan guarantees, to 25 projects, in under two years
 - Almost 60,000 direct jobs created or saved
 - Approximately 40 million tons of carbon dioxide avoided each year – equal to 25 coal plants
 - Almost 23 million megawatt-hours of clean energy generation – enough to power almost 2 million homes
- Loan Programs are Pro-Taxpayer
 - Projects are de-risked to fullest extent possible by over 100 deeply experienced professionals (ex-Fortune 100 financial institutions, Ex-Im, OPIC, etc.)
 - When projects succeed, loans are repaid and cost to government is zero
 - Title XVII programs are self-sustaining; borrower fees cover program's operating costs



Ford



Vogtle

